

DIN EN ISO 14356:2025-02 (E)

Dentistry - Duplicating material (ISO 14356:2024)

Contents

| | Page |
|---|-----------|
| European foreword..... | 4 |
| Foreword..... | 5 |
| 1 Scope..... | 6 |
| 2 Normative references..... | 6 |
| 3 Terms and definitions..... | 6 |
| 4 Classification by types..... | 8 |
| 5 Material characteristics and properties — Requirements..... | 9 |
| 5.1 General..... | 9 |
| 5.2 Melting temperature — Type 1 materials..... | 9 |
| 5.3 Pouring temperature — Type 1 materials..... | 9 |
| 5.4 Component colours — Type 2 materials..... | 9 |
| 5.5 Detail reproduction..... | 9 |
| 5.6 Compatibility with refractory investment and, if applicable, gypsum..... | 9 |
| 5.7 Elastic recovery..... | 9 |
| 5.8 Tear strength..... | 9 |
| 5.9 Resistance to fungal growth — Type 1 materials only..... | 9 |
| 6 Sampling..... | 9 |
| 7 Test methods — General..... | 10 |
| 7.1 Laboratory conditions..... | 10 |
| 7.2 Verification of apparatus function..... | 10 |
| 7.3 Specimen preparation and testing..... | 10 |
| 7.3.1 General..... | 10 |
| 7.3.2 Preparation of Type 1 materials..... | 10 |
| 7.3.3 Preparation of Type 2 materials..... | 10 |
| 7.4 Pass/fail determinations..... | 10 |
| 7.5 Expression of test results..... | 11 |
| 8 Specific specimen preparation and test procedures..... | 11 |
| 8.1 Melting temperature test — Type 1 materials only..... | 11 |
| 8.2 Detail reproduction test..... | 11 |
| 8.2.1 Apparatus and materials..... | 11 |
| 8.2.2 Specimen preparation (three specimens)..... | 12 |
| 8.2.3 Test procedure..... | 12 |
| 8.2.4 Pass/fail determination and expression of results..... | 12 |
| 8.3 Test for compatibility with refractory investment and, if applicable, gypsum..... | 12 |
| 8.3.1 Apparatus and materials..... | 12 |
| 8.3.2 Specimen preparation..... | 13 |
| 8.3.3 Test procedure..... | 14 |
| 8.3.4 Pass/fail determination and expression of results..... | 14 |
| 8.4 Elastic recovery test..... | 14 |
| 8.4.1 Apparatus — Type 1 materials..... | 14 |
| 8.4.2 Apparatus — Type 2 materials..... | 14 |
| 8.4.3 Apparatus — Type 1 and Type 2 materials..... | 14 |
| 8.4.4 Specimen preparation — Type 1 materials (five specimens)..... | 15 |
| 8.4.5 Specimen preparation — Type 2 materials (five specimens)..... | 15 |
| 8.4.6 Test procedure — Type 1 and Type 2 materials..... | 16 |
| 8.4.7 Calculation of results..... | 16 |
| 8.4.8 Pass/fail determinations and expression of results..... | 17 |
| 8.5 Tear strength test..... | 17 |

| | | |
|-----------|--|-----------|
| 8.5.1 | Apparatus and materials | 17 |
| 8.5.2 | Specimen preparation (five specimens) | 18 |
| 8.5.3 | Test procedure..... | 19 |
| 8.5.4 | Calculation of results..... | 19 |
| 8.5.5 | Pass/fail determination and expression of results..... | 19 |
| 8.6 | Fungal growth resistance test — Type 1 agar materials only..... | 19 |
| 8.6.1 | Apparatus and materials | 19 |
| 8.6.2 | Specimen preparation (1 test specimen and 1 control specimen)..... | 19 |
| 8.6.3 | Test procedure..... | 19 |
| 8.6.4 | Pass/fail determination | 19 |
| 8.6.5 | Expression of results | 20 |
| 9 | Requirements for packaging..... | 20 |
| 10 | Requirements for labelling..... | 20 |
| 11 | Instructions for use — Required information | 20 |
| | Annex A (informative) Optional procedure for tear test..... | 31 |
| | Bibliography..... | 35 |